

Comparisons of Job Characteristics

Focus Occupation: [Electrical and Electronic Engineering Technicians \(17-3023\)](#)

Associated Occupation: [Electrical and Electronics Repairers, Powerhouse, Substation, and Relay \(49-2095\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 75

Focus Occupation: Electrical and Electronic Engineering Technicians (17-3023)

Associated Occupation: Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Mechanical	6.8	17.1	11.6	<<	Extensive education and/or training may be required
Design	5.2	13.2	10.2	<<	Extensive education and/or training may be required
Public Safety and Security	6.9	12.7	4.7	<<	Extensive education and/or training may be required
Computers and Electronics	8.4	12.2	15.8	>>	Current knowledge level is likely more than sufficient
Physics	4.3	10.1	6.3	<<	Extensive education and/or training may be required
Telecommunications	3.9	10.0	8.4	<	Expanded education and/or training may be required
Engineering and Technology	5.7	9.3	12.4	>>	Current knowledge level is likely more than sufficient
Building and Construction	4.0	8.4	4.1	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 74

Focus Occupation: Electrical and Electronic Engineering Technicians (17-3023)

Associated Occupation: Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Equipment Maintenance	3.5	11.4	7.9	<<	Extensive development of skills in this area may be required

Repairing	3.4	11.1	8.0	<<	Extensive development of skills in this area may be required
Troubleshooting	4.5	10.7	8.8	<	A higher skill level may be required
Quality Control Analysis	5.9	10.2	8.8	<	A higher skill level may be required
Operation Monitoring	6.6	10.0	9.4	0	Current skill level may be sufficient
Equipment Selection	3.3	5.6	7.0	>	Skill level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 93			
Focus Occupation: Electrical and Electronic Engineering Technicians (17-3023)					
Associated Occupation: Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Arm-Hand Steadiness	6.8	10.3	8.8	<	Some improvement in abilities may be required
Visualization	7.5	10.1	9.8	0	Current ability level may be sufficient
Control Precision	6.6	10.0	7.9	<	Some improvement in abilities may be required
Selective Attention	8.7	10.0	9.0	<	Some improvement in abilities may be required
Finger Dexterity	7.6	9.8	9.9	0	Current ability level may be sufficient
Manual Dexterity	6.5	9.4	8.4	<	Some improvement in abilities may be required
Visual Color Discrimination	6.4	9.3	9.6	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 71
Focus Occupation: Electrical and Electronic Engineering Technicians (17-3023) Associated Occupation: Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)		
Work Activities	Exclusivity of Activity	
Analyze test data	64	
Fabricate, assemble, or disassemble manufactured products by hand	11	
Install/connect electrical equipment to power circuit	57	
Maintain or repair work tools or equipment	81	
Read blueprints	10	
Read schematics	34	
Read technical drawings	7	
Repair or replace electrical wiring, circuits, fixtures, or equipment	49	
Solder electrical or electronic connections or components	55	

Understand service or repair manuals	40
Understand technical operating, service or repair manuals	6
Use electrical or electronic test devices or equipment	40
Use hand or power tools	2

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: n/a

Focus Occupation: Electrical and Electronic Engineering Technicians (17-3023)

Associated Occupation: Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)

Tools and Technologies

Exclusivity

Tools and technology data is unavailable for one or both occupations.

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.